

CLAIMS

WE CLAIM AS OUR INVENTION:

1. A burner assembly comprising:

a burner grate comprising a plurality of humps, integrally formed in a glass ceramic cooktop, and distributed around an opening in the cooktop; and

a burner, positioned in the opening, comprising a plurality of burner ports, a pattern of the burner ports selected to restrict flame formation in a region proximate a burner grate, so that flames from the respective burner ports do not impinge upon the burner grate.

2. The burner assembly of claim 1, the pattern of the burner ports selected to avoid flame formation in the region proximate the burner grate.

3. The burner assembly of claim 1, wherein the burner ports are aligned in the pattern so that no burner port is positioned proximate any burner grate.

4. The burner assembly of claim 1, wherein a burner port positioned proximate a burner grate is configured to direct a flame away from the burner grate.

5. The burner assembly of claim 4, wherein the burner port positioned proximate a burner grate is disposed at an angle with respect to a radial direction so that an outlet of the burner port is positioned proximate a region unobstructed by a burner grate.

6. The burner assembly of claim 4, wherein the burner port positioned proximate a burner grate is bifurcated at an outlet end, so that respective outlets at the outlet end are positioned proximate a region unobstructed by a burner grate.

7. The burner assembly of claim 4, wherein the burner port positioned proximate a burner grate comprises a shape selected from the group consisting of a "Y" shape and a "V" shape.

8. The burner assembly of claim 1, in combination with a cooking appliance.

9. A burner assembly comprising:

a burner grate comprising a plurality of humps, integrally formed in a glass ceramic cooktop, and distributed around an opening in the cooktop; and

a burner, positioned in the opening, comprising a plurality of burner ports positioned in the burner to coincide with regions proximate the burner unobstructed by the burner grate.

10. A burner assembly comprising:

a burner grate comprising a plurality of humps, integrally formed in a glass ceramic cooktop, and distributed around an opening in the cooktop; and

a burner, positioned in the opening, comprising a plurality of flame-free portions between burner ports, at least some of the flame-free portions selected to coincide with a burner grate proximate the burner, thereby avoiding interference between the burner grate and flames produced by the burner.

11. A method of firing a burner comprising:

providing a burner assembly comprising a burner and a burner grate comprising a plurality of humps, integrally formed in a glass ceramic cooktop, and distributed around an opening in the cooktop;

positioning the burner in the opening; and

configuring an array of burner ports in the burner to avoid flame formation in regions proximate the burner in correspondence with the humps, so that flames from the burner do not impinge upon any burner grate therein.